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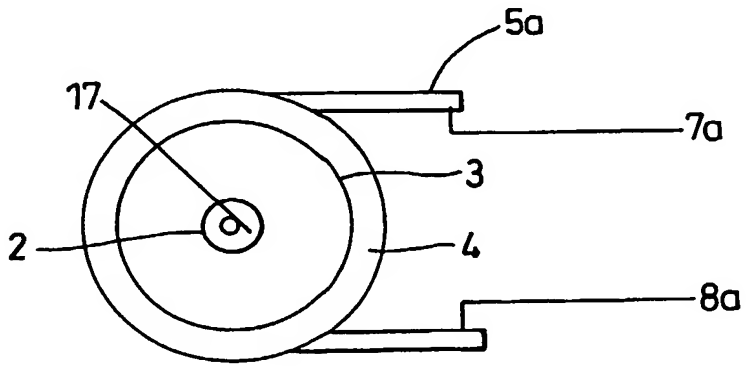

(57) Abstract: A laminar or cyclonic particle separator for gas, liquid-liquid and fluidizable solids separation comprised of a section with a non-metallic housing having an annulus and a chamber, an optional anode cooled with a first coolant in and a first coolant out disposed in the chamber, a DC or pulsating DC power source connected to the anode, at least one magnetic coil disposed adjacent the chamber and cooled with a second coolant, a high voltage pulsating DC power source connected to the magnetic coil, and a fluid (gas, liquid or fluidizable solids) inlet port connected to the housing, and also a section with a non-metallic separator tube connected to the housing and disposed within the housing, a first fluid outlet connected to the annulus through the housing. This device can then separate a stream rich in a targeted element (first fluid) and a stream lean in a targeted element (second fluid) from the device and thus discharge a stream almost free of the targeted element or almost 100 % the targeted element.

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